DRAFT CLAIMS

What is claimed is:

1.   A processor-based method comprising combining a digital graphics object and a digital picture while both the digital graphics object and the digital picture are in a compressed format.

2.   The processor-based method as defined in claim 1 further comprising, prior to combining, compressing the digital graphics object to be in the compressed format.

3.   The processor-based method as defined in claim 2 wherein combining further comprises combining a chrominance value in the digital graphics object with a chrominance value in the digital picture based on a weight factor, the weight factor proportional to a number of luminance values in the digital graphics object having values indicating transparency.

4.   The processor-based method as defined in claim 3 further comprising:

     calculating the weight factor during compressing; and

     storing the weight factor within the digital graphics object.

5.   The processor-based method as defined in claim 4 further comprising storing the weight factor in the least significant bits of the chrominance value.

6. The processor-based method as defined in claim 2 further comprising compressing the digital graphics object in 4:4:4 space to one of 4:2:2 space or 4:2:0 space.

7. The processor-based method as defined in claim 1 wherein combining further comprises combining a chrominance value in the digital graphics object with a chrominance value in the digital picture based on a weight factor, the weight factor proportional to a number of luminance values in the digital graphics object that indicate transparency.

8. The processor-based method as defined in claim 7 further comprising calculating the weight factor contemporaneously with combining.

9. The processor-based method as defined in claim 7 further comprising, prior to combining, reading the weight factor from the digital graphics object.

10. The processor-based method as defined in claim 1 further comprising combining while both the digital graphics object and the digital picture are in a 4:2:2 space format.

11. The processor-based method as defined in claim 1 further comprising combining while both the digital graphics object and the digital picture are in a 4:2:0 space format.

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12. A system comprising:

a processor;

a memory coupled to the processor; and

wherein the processor, executing a program, overlays a digital graphics object and a digital picture while each of the digital graphics object and the digital picture are in compressed format.

13. The system as defined in claim 12 further comprising a charge coupled device (CCD) array coupled to the processor, and wherein the processor, executing a program, acquires the digital picture using the CCD array.

14. The system as defined in claim 12 further comprising a radio transceiver coupled to the processor, and wherein the processor, executing a program, receives at least one of the digital graphics object or the digital picture through the wireless transceiver.

15. The system as defined in claim 12 further comprising a radio transceiver coupled to the processor, and wherein the processor, executing a program, transmits the digital picture created by the overlaying of the digital graphics object and the digital picture using the transceiver.

16. The system as defined in claim 12 wherein the processor, executing the program, overlays the digital graphics object and the digital picture while each of the digital graphics object and the digital picture are in a 4:2:2 space format.

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17.   The system as defined in claim 12 wherein the processor, executing the program, overlays the digital graphics object and the digital picture while each of the digital graphics object and the digital picture are in a 4:2:0 space format.

18.   A method comprising:

compressing an uncompressed graphics object to create a compressed graphics object; then

replacing a pixel luminance value of a compressed digital picture with a pixel luminance value of the compressed graphics object; and

modifying a chrominance value of the compressed digital picture based on a chrominance value of the compressed graphics object.

19.   The method as defined in claim 18 wherein modifying the chrominance value of the compressed digital picture further comprises blending the chrominance value of the compressed digital picture with the chrominance value of the compressed graphics object based on a weight factor.

20.   The method as defined in claim 19 further comprising blending using substantially the following equation:

$$CHR(W) = (1-W) CHP + (W)CHO$$

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where W is the weight factor, CHR(W) is the resulting chrominance value after blending, CHP is the chrominance value from the digital picture, and CHO is the chrominance value from the graphic overlay.

21.   The method as defined in claim 19 further comprising blending based on the weight factor, a value of the weight factor based on a number of pixel luminance values indicating transparency close to the chrominance value of the graphic overlay.

22.   A computer readable media storing a program that, when executed by a processor, performs a method comprising overlaying a graphics object onto a picture while both the graphics object and the picture are in a compressed format.

23.   The computer readable media as defined in claim 22 wherein overlaying of the method further comprises overlaying a chrominance value in the graphics object with a chrominance value in the picture based on a weight factor, the weight factor proportional to a number of luminance values in the graphics object having values indicating transparency.

24.   The computer readable media as defined in claim 23 wherein overlaying further comprises calculating the weight factor contemporaneously with overlaying.

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25.   The computer readable media as defined in claim 23 wherein the method further comprises, prior to overlaying the chrominance values, reading the weight factor from the graphics object.

26.   The computer readable media as defined in claim 22 wherein overlaying further comprises overlaying while both the digital graphics object and the digital picture are in a 4:2:2 space format.

27.   The computer readable media as defined in claim 22 wherein overlaying further comprises overlaying while both the digital graphics object and the digital picture are in a 4:2:0 space format.

28.   A computer readable media storing a program that, when executed by a processor, performs a method comprising:

  compressing a graphics object to create a compressed graphics object by combining a plurality of chrominance values into a single chrominance value;

  calculating a weight factor based on a number luminance values, associated with the plurality of chrominance values, that indicate that the corresponding luminance values in a picture to be overlaid by the graphics object should remain unchanged; and

  storing the weight factor within the compressed graphics object.

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29.   The computer readable media as defined in claim 28 wherein the method further comprises compressing the graphics object to created a compressed graphics objection in a format selected from the group consisting of: 4:2:2 space format; and 4:2:0 space format.

30.   The processor-based method as defined in claim 28 further comprising storing the weight factor in the least significant bits of the chrominance value.